Design Technology Planning and Progression of Skills

Year 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	What's going on?	***Toys and Treasure***	***Can you Dig it?***	***Animals around the World***	***Art Attack***	***On Holiday with Barnaby Bear***
	Design and make	***Design and make***	***Design and make***	***Cooking and Nutrition***	***Design, Make, Evaluate and Technical Knowledge***	***Design, Make, Evaluate and Technical Knowledge***
Design Technology	Previous Learning: None What we will learn: • Pupils will design a sweet for Willy Wonka following the criteria of using all their five senses to make the most appealing product. • Pupils will design a sweet and select ingredients to bring their design and special feature to life • Pupils will follow a recipe to make a sweet and use additional ingredients to personalise and add a special feature to meet the criteria. • Pupils will generate ideas of how their sweet will look and they will use iPads to design their final product. Final piece A new, unique sweet for Willy Wonka to sell. This will be an image created on the iPad, through making an example using ingredients and descriptive writing. • Pupils will recreate a landmark from their walk around the local area.	Previous Learning: The pupils have used a range of materials when junk modelling and they have used clay to make Diwa lamps. What we will learn: • Pupils will design a new species of dinosaur using a design criterion from facts gathered about dinosaurs. • Pupils will use their ideas and design their dinosaur using a template. • Pupils will use clay to bring their idea to life, using tolls to cut and shape their model. • As a class the pupils will collate ideas and design a life-size model of a dinosaur. • Pupils will use their design to select and use a range of materials (recycled materials, fabric, leaves etc) most suitable for their dinosaurs features and be able to justify their choice. • Pupils will use a range of tools for cutting and modelling and finishing to create their dinosaur Final piece	Previous Learning No previous sewing experiences What we will learn: • Pupils will design an appealing gift (a flower) for someone special based on their design criteria. • Pupils will design their gift using an iPad and then make mock-ups using textiles to help bring their ideas to life. • Pupils will be taught how to sew a button on • Pupils will select from a range of tools to cut with and sew with to create their piece of work. • Pupils will choose the most appealing and practical materials to create their flower. Final piece A gift for someone special (a felt flower stitched on to a hessian background by sewing a button on)	Previous Learning Pupils have discussed healthy foods when exploring healthy snacks What we will learn: • Pupils will learn what be healthy and healthy eating are through teaching, media and looking at the ingredients of food items. • Choosing from a range of food items and using their knowledge of healthy food, pupils will design a menu and make a healthy tea for the Tiger (The Tiger who came Tea). • Afterwards the pupils will evaluate their choices and identify any changes they would make next time. • Whilst exploring what healthy food is, pupils will identify where food comes from. Final piece An alternative healthy lunch for the Tiger that came to tea.	Previous Learning None What we will learn • Pupils will make a bridge with levers to reveal the troll under the bridge. • As a class the pupils will research and evaluate existing bridges and decide which elements will enable them to create a functioning bridge against the design criteria • Pupils will follow instructions to create their own functional bridge. • Pupils will choose from a range of equipment, the tools needed to make a bridge • Pupils will choose materials that will meet the criteria and be the most suitable to build a functioning bridge. • Pupils will explore and use levers to lift the bridge to reveal the troll. • Pupils will evaluate their product and discuss ways they could improve it should they repeat the lesson	Previous Learning None What we will learn: • After reading the Lighthouse Keeper's lunch pupils will build their own pulley system to transport food from the lighthouse • As a class the pupils will research and evaluate existing pulley systems and decide which elements will enable them to create a functioning pulley system against the design criteria • Pupils will follow instructions to build a lighthouse, basket and pulley system. • Pupils will choose from a range of equipment, the most appropriate tools needed to make the lighthouse and basket • Pupils will choose materials that will meet the criteria and be the most suitable to create a functional and operational pulley system. • Pupils will explore and use a pulley system to

	• Pupils will use a design template to create their landmark explaining their choice of features and materials that they will use. • Pupils will use their design and build the feature using a range of materials that best represent the feature and as a class recreate the path, they took on the local walk. <u>Final piece</u> A recreation of the landmarks found on the pupil's local walk.	A life-size model of a new species of dinosaur.			<u>Final piece</u> A functioning lever bridge.	transfer an item from one place to another. • Pupils will evaluate their final product and discuss ways they could improve it should they repeat the lesson <u>Final piece</u> A functioning pulley system transferring items from the lighthouse to the child <u>What we will learn:</u> In the school's annual Design Technology competition, pupils will be challenged to design and make a complex structure that can hold a given weight, using only the materials provided • As a class the pupils will research and evaluate different structure types that hold weight • Pupils will design a simple structure based on a design criterion and show their design through drawings and presenting these on flipgrid. • Pupils will choose from a range of equipment, the most appropriate tools needed to build their design • Pupils will choose materials that will meet the criteria and be the most suitable to create a study and strong structure. • Pupils will test their products before the competition and evaluate their design, making amendments exploring how to make it stronger and more stable. Final piece

						A structure that supports a given weight

Year 2

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

	Discovering London	***All Creatures Great and Small***	***Exciting Explorers***
	Design, Make, Evaluate **Cooking and Nutrition**	**Design, Make, Evaluate**	***Design, Make, Evaluate, Technical Knowledge***
Design Technology	Previous Learning The pupils have designed and created a sweet wrapper. They used a range of materials when junk modelling. They also used clay to make diva lamps for Diwali. What we will learn • Pupils will design purposeful, functional houses for a re-enactment of the Great-Fire of London based on a design criteria ensuring it fits the specification of houses at the time. • Pupils will generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology such as Paint Pro. • Pupils will follow their instructions to create their 3d models of their houses. • Pupils will select from a range of junk modelling materials and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) • Select from and use a wide range of materials (recycled materials) and components, including construction materials to build house for The Great Fire of London • Pupils will explore and evaluate a range of existing products that are appropriate to build a house for The Great Fire of London. This will include exploring the properties of materials that were used to build houses during the time of the Great Fire of London and compare them to materials used today (the pupil's homes) and discuss their suitability for purpose. • Pupils will evaluate their ideas and final products against their design criteria and peers' feedback. Final piece A house for The Great Fire of London for re-enactment. What we will learn	Previous Learning Pupils have learnt basic sewing skills such as threading a needle and using a basic stitch to sew a button on creating a gift for someone special. What we will learn • Pupils will explore and evaluate a range of existing puppets, selecting the best features. • Pupils will design a functional, appealing puppet for themselves based on a given design criteria. • Pupils will use IT apps to generate and generate their ideas, following a criteria • Pupils will generate and communicate their ideas and end product using Flipgrids. • Pupils will select from and use a range of tools for cutting, shaping, sewing and finishing to make their puppet. • Pupils will select from and use a wide range of materials and components and textiles such as felt, needles, wool and buttons most suitable for their puppets • Pupils will evaluate their ideas and products against design criteria to show an understanding of the selection of materials. They will assess whether it met the criteria and discuss what they would change if they made a puppet again. Final piece A hand puppet, linked to the core text	Previous Learning The pupils have learnt how to use a variation of materials and equipment to build a bridge with a lever and they have created a pully system. What we will learn • Pupils will design an appropriate and functional car based on design criteria • Pupils will explore and evaluate a range of existing products (toys, models and real-life cars) with peers, to share ideas that would work and would not work • Pupils will research the physical features of a car and evaluate which are the best ones to make the best car. • Pupils will explore using wheels and axles through research and design and use them to make their product functional • Pupils will generate, develop, model and communicate their ideas through talking and presenting their future car in whole class presentations. • Pupils will select from and use a range of tools and equipment to cut, shape and join parts of their car • Pupils will select from and use a wide range of materials and components, including construction materials according to their characteristics for the car to work effectively. • Pupils will evaluate their ideas, features of the car and products against their original design criteria and discuss ways they would amend if they made the car again Final piece A functional model car. What we will learn

	• Pupils will research the principles of a healthy and varied diet (discussing nutritional value) and compare and evaluate this against Paddington's diet. • Pupils will research healthy alternative sandwich fillings and understand where these ingredients come from. • Pupils will design a healthy sandwich for Paddington and write instructions for making it • Pupils will generate favourite sandwich fillings by conducting a survey and creating tallies. • They will select from and use a wide range of materials and ingredients to make sandwiches to feed Paddington, according to their characteristics. • Pupils will evaluate their final products against a design criteria and discuss the health benefits of their sandwich versus Paddington's Marmalade sandwich. <u>Final piece</u> A healthy alternative sandwich for Paddington		In the school's annual Design Technology competition, pupils will be challenged to design and make a simple structure that can hold a given weight, using only the materials provided. • As a class the pupils will research and evaluate different structure types that hold weight • Pupils will design a simple structure based on a design criteria and show their design through drawings and presenting these on flipgrid. • Pupils will choose from a range of equipment, the most appropriate tools needed to build their design • Pupils will choose materials that will meet the criteria and be the most suitable to create a study and strong structure. • Pupils will test their products before the competition and evaluate their design, making amendments exploring how to make it stronger and more stable. <u>Final piece</u> A structure that supports a given weight

Year 3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Design Technology	***Discovering Dinosaurs***		***Opposites Attract***		***Bella Italia***	
	Design, Make, Evaluate Cooking and nutrition		***Design, Make, Evaluate, Technical knowledge***		***Design, Make, Evaluate***	
	Previous Learning Pupils looked at animal habitats and created their group dens in the environment area. What we will learn • During historical study, pupils will explore and discuss Stone Age settlements. They will research and consider the design of Stone Age dwellings. From this, pupils will create a design criterion and generate their ideas for their recreation through sketches. • To investigate and analyse the houses of Skara Brae, considering how they were fit for purpose and how they were appealing. • Pupils will also make comparisons between the Stone Age dwelling and modern homes, looking at materials and tools used and building techniques. • Pupils will use their research to select materials with the same properties according to aesthetic and functional qualities. • Pupils will evaluate their final houses against those from the Stone Age and against their design criteria. • Pupils will understand how key events and individuals in design and technology have helped shape the world and how this has shaped houses of today. Final piece A replica Stone Age dwelling using natural material from the environment area. What we will learn. • Pupils will explore food eaten during the Stone Age and where the food ingredients came from. • Pupils will make Stone Age bread, using traditional cooking methods for preparation (grinding and binding) and cooking (baking over a fire). • Pupils will then compare this to how bread is made (processed) today.		Previous Learning The pupils designed, made and evaluated their own toy car in the theme of 'Back to the Future.' They used a pully system, a range of tools, explored physical features and compared their creation to existing products. What we will learn • During science lesson pupils will explore forces and how friction impacts movement, they will investigate and analyse a range of existing products used to create friction. • They will use their science knowledge to develop a design criterion to inform the design of a friction ramp to allow them to perform the experiment. • Pupils will ensure their design is innovative, functional, appealing and fit for purpose. • Pupils will generate annotated diagrams of their design. • Pupils will use their design criteria to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) • Pupils will evaluate ideas and products against their own design criteria and consider the views of others to improve their work. They will also test the ramp and adjust make it more effective. Final piece A friction ramp to perform a science experiment.		Previous Learning The pupils designed, made and evaluated their own puppet using a variety of stitches. They used a range of tools that developed their fabric cutting skills and design techniques. What we will learn • To create a learning tool that will be useful and help support the learning of Roman Numerals • During historical study pupils will explore Roman artefacts. Pupils will research and develop design criteria to inform the design of an innovative, functional and appealing bookmark aimed at the Romans. • Pupils will generate and, develop annotated sketches of their design and use computing to aid their final design. • Pupils will use their design to select from a wide range of materials and textiles considering their functional properties and aesthetic qualities. • Upon choosing their materials, pupils will use this information to determine which tools to appropriately use in creating their bookmark (sewing, cutting, joining) • Pupils will evaluate their bookmark against their own design criteria and consider the views of others to improve their work. • Pupils will evaluate the effectiveness of the bookmark as a learning tool and discuss any changes they would make to better it's impact. Final piece A useful learning aid – A bookmark with Roman Numerals What we will learn In the school's annual Design Technology competition, pupils will be challenged to design and make a complex structure that can hold a given weight, using only the materials provided. • As a class the pupils will research and evaluate different structure types that hold weight • Pupils will design a more complex structure, focusing on useful characteristics, based on a design criterion and show their design through drawings and presenting these on flipgrid. • Pupils will choose from a range of equipment, the most appropriate tools needed to build their design		

	• Pupils will apply their understanding of healthy eating and compare the diet during the Stone Age to a balanced and varied diet today, discussing food and cooking tools available at the times. • Pupils will explore food available during the Stone Age and how seasonality would have impacted this. <u>Final product</u> Bread from the Stone Age		• Pupils will choose materials that will meet the criteria and be the most suitable to create a study and strong structure, understanding the importance of a material's functional properties. • Pupils will test their products before the competition and evaluate their design, making amendments exploring how to make it stronger and more stable. <u>Final piece</u> A structure that supports a given weight

Year 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Design Technology	***The Americas***		***Invaders and Settlers***		***George's Marvellous Medicine***	***The Awesome Egyptians***
	Design, Make, Evaluate		***Design, Make, Evaluate, technical Knowledge***		***Cooking and Nutrition***	***Design, Make, Evaluate, Technical knowledge***
	Previous Learning In year 3, pupils used natural materials to make prehistoric dens and explored Roman Art and patterns. What we will learn • To develop design criteria for dream catchers, based on Native American art and patterns. • Research and investigate a range of existing products (dream catchers) and discuss the history of dream catchers and the significance to Native American culture. • Select from and use a wider range of tools and equipment to create a functioning dream catcher, using cutting, shaping, joining and finishing techniques to make an appealing product. • Pupils will compare their dream catcher to other designs and evaluate how it could be improved or enhanced, using technology. • Pupils will evaluate the effectiveness of the dream catcher through questioning if nightmares still occur after dream catchers are in place. • Pupils will research and understand how the invention of dream catchers has influenced Native American culture and the wider world. Final piece To replicate an authentic Native American dream catcher using a wide range of natural materials.		Previous Learning Pupils have studied Native American Art, including different types of dream catchers and used these ideas to create thier own designs. What we will learn • Research and explore Viking long boat designs and artefacts and consider the intended purpose and function. • Sketch long boat designs and annotate cross-sectional patterns, discussing the similarities and differences in their mock-up. • Evaluate how the Viking long boat design influenced the future engineering of boats, which are still relevant in modern day society. • Apply their understanding of how to strengthen, stiffen and reinforce the structure of their boat, to test its functionality. • Evaluate peer designs and models and provide constructive feedback to gain a better insight into the mechanical systems of their boat. Final piece To create a Viking long boat which floats on water.		Previous Learning Pupils have made healthy snacks and have learned about what healthy means and why it is important to live a healthy lifestyle. What we will learn • To understand and apply a healthy and varied diet, to generate models, prototypes and computer aided designs of their marvellous smoothies. • Pupils will research seasonality and explore where and how a variety of fruits and vegetables are grown and processed. • Pupils will prepare and create a smoothie using a range of cooking and preparation techniques, safely. • Pupils will evaluate their smoothies against their own criteria and considering the views of teachers, who will taste test their smoothies and give feedback to improve their design. Final piece	Previous Learning Created dream catchers and designed a function Viking long boat. What we will learn In the school's annual Design Technology competition, pupils will be challenged to design and make a complex structure that can hold a given weight, using only the materials provided • As a class the pupils will research and evaluate different structure types that hold weight • Pupils will design a more complex structure, focusing on useful characteristics, based on a design criterion and show their design through drawings and presenting these on Flipgrid. • Pupils will choose from a range of equipment, the most appropriate tools needed to build their design • Pupils will choose materials that will meet the criteria and be the most suitable to create a study and strong structure, understanding the importance of a material's functional properties. • Pupils will test their products before the competition and evaluate their design, making amendments exploring how to make it stronger and more stable.

			To design and create a healthy and flavoursome smoothie to replace fizzy drinks.	<u>Final piece</u> A structure that supports a given weight

Year 5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	To infinity and beyond…		***The Maya Civilisation***	***The Terrible Tudors***	***Mother Nature: Out of Control?***	***On the move!***
	Design, Make, Evaluate:		**Design, Make, Evaluate, Technical knowledge Cooking and Nutrition:**	**Design, Make, Evaluate Cooking and Nutrition:**	**Design, Make, Evaluate:**	**Design, Make, Evaluate, Technical knowledge**
DesignTechnology	Previous Learning In year 4 they looked at designed and creating a musical instrument from recycled materials using skills such as: applying their understanding of how to reinforce structures; researching and sketching to design a final piece; selecting from a range of materials. What we will learn • How to use research and develop design criteria to inform the design of innovative, functional, appealing rocket that is fit for purpose, traveling a distance. • To explore rocket designs of existing rockets to use effective designs to make a competitive rocket. • How to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design in sketch books and on paint 3D. • To select from and use a wider range of tools and equipment to perform practical tasks including scissors, different types of glues, knives. • Select from and use a wider range of materials and components from a range of recycled materials including foil, cardboard, plastic, paper. • How to evaluate the effectiveness of their prototype and discuss what they would change should they repeat the experiment. Final Piece To produce their own rocket made from recycled materials, that will compete against other rocket designs to travel the furthest distance.		Previous Learning In Year 4 they also looked at another culture's artwork, studied and recreated it. They have not yet worked with clay for a whole project. In Year 3 and 4 they began to develop their use of sketchbooks. Pupils have used Lego WeDo to design and build robots to perform a number of tasks. What we will learn • To explore the Maya culture and use this to inform their own designs. • To understand that the Maya people used ceramics for a range of purposes including storage of food and beverages; as plates, cups and bowls and to commemorate people and events. • How to replicate the style of vessel created and produce something that would have been fit for purpose • How to use discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design to support their design process. • How to work with clay carefully using appropriate tools and equipment to perform practical tasks accurately. • Combine with their history and archaeology knowledge to investigate and analyse	Previous Learning They have used a range of materials to create a wealth of projects in KS2 so far. They will have used recyclable materials confidently in term 1. They will have begun to look at food technology in the previous half term. What we will learn • Research and analyse House of York and House of Lancaster crests and coat of arms to inform the design of an innovative and functional shield. • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design. • What shields were used for and how to ensure that they are strong and reinforced. • How to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately • Which appropriate materials and components to use in the creation, considering strength and colour.	Previous Learning They will have used their sketchbook skills confidently in Years 3 &4, as well as in the previous terms' topics. They learnt about rocks and volcanos in Year 3. What we will learn • Pupils will research how a volcano is formed and which natural materials it is made up of to support their geographical knowledge through design. • What Modroc is and how to use it effectively to create a volcano. • How to use materials – including Modroc- to build up texture on a 3D design. • To study the appearance of volcanos and use photographs to help study the features and colours to replicate. • To select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Evaluating if their design recreated a volcano.	Previous Learning They will have made their own toy car in Year 3. What we will learn • To look into the designs of a range of vehicles and how they have developed over time. • How systems that use pulleys and gears work and how to replicate this. • How our simple systems of pulleys and gears represent how vehicles work. • To use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups (decide who their newly designed vehicle has been created for). • Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities • To investigate and analyse a range of existing products

		artefacts left by the Maya people. • How to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Final Piece To create their own Maya pottery made from clay. What we will learn: • To use technical knowledge to create and program a robot to dance in the traditional Maya style. • To understand and use motors. • To understand and use gears to transfer movement from the motor. • To understand and use belt drives to transfer movements from the motor. • To apply their understanding of programming and controlling Lego • Evaluate designs against a criterion and propose improvements to make for next time Final product A robot which can dance **Cooking and Nutrition** What we will learn: • Research the foods available in Central and South America to see how the Maya people ate. Evaluating their diet type and comparing to a healthy balanced diet. • Discover, prepare and cook a variety of dishes using a range of cooking techniques. • Understand seasonality and know where, and how, a variety of ingredients are grown/reared in ingredients to replicate the Mayan meals.	• To compare existing shields and evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Final Piece Tudor Shields made with their own crest and coat of arms. Cooking and Nutrition What we will learn: • Consider which food was available in Tudor times and how/why it differs to modern day. • Evaluate the nutritional value of the Tudor diet and if it was a healthy balanced diet. • Learn about the meaning of foraging and discover the types of food retrieved this way. Also discussing the impact of seasonality during these times. • Learn to cook and prepare sweet and savoury Tudor style delicacies, using various preparation and cooking techniques. Final Piece To replicate a Tudor style food course.	Final Piece: A working and erupting Modroc volcano.	• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Understand how key events and individuals in design (Ford) and technology have helped shape the world • Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages Final Piece A woodwork vehicle with working mechanisms – pulleys and gears. What we will learn • In the school's annual Design Technology competition, pupils will be challenged to design and make a complex structure that can hold a given weight, using only the materials provided • As a class the pupils will research and evaluate different structure types that hold weight • Pupils will design a more complex structure, focusing on useful characteristics, based on a design criterion and show their design through drawings and presenting these on Flipgrid. • Pupils will choose from a range of equipment, the most appropriate tools needed to build their design

		Final Piece A Maya style Salad			• Pupils will choose materials that will meet the criteria and be the most suitable to create a study and strong structure, understanding the importance of a material's functional properties. • Pupils will test their products before the competition and evaluate their design, making amendments exploring how to make it stronger and more stable. Final piece A structure that supports a given weight

Year 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	The World at War		***Ancient Greece***	***We are Scientists***	***Brilliant Business***	***Showtime***
	Design, Make, Evaluate		***Cooking and Nutrition***		***Design, Make, Evaluate and Technical Knowledge***	***Design, Make, Evaluate and Technical Knowledge***
Design Technology	Previous Learning Pupils have made shields and used recycled materials to make rockets. They have used skills including researching and developing design criteria to inform designs of products that are innovative, functional, appealing products that are fit for purpose. What we will learn: • Pupils will explore different designs of shelters and make comparisons between them – narrowing this down to different types of Anderson shelters. • Pupils will have discussions around possible materials and equipment for the Anderson shelter. Pupils will discuss the term scale and create a design for their Anderson shelter, focussing on the materials they will need. Pupils will explore the functional qualities of the materials used. • Pupils will gather resources (materials and tools) to create and test the structures planned for the shelter, evaluating and amending throughout the project. • Using a revised plan, pupils will select tools, materials and equipment to build their model shelter as per their design. • Pupils will consider the effectiveness of the design through a final evaluation, considering sturdiness and how successfully they have met the criteria. Pupils will make suggestions of how they could improve their design in the future. Final Piece To create a scaled model of an Anderson shelter from wood and corrugated cardboard.		Previous learning Pupils will know where food comes from and the principles of healthy eating. They will already understand seasonality and where foods are grown, reared, caught and processed. What we will learn • Pupils will discuss what makes a healthy meal and the nutrition value of different food groups. • Pupils will search recipe books for meal ideas that fit the criteria of the group and agree a meal. • Pupils will adapt meals to make more nutritious with healthy swaps and healthier cooking methods. • Through research, pupils will identify how the foods they plan to use are grown, caught or reared. Pupils will also consider the seasonality of different fruits and vegetables and how this impact on the ingredients available to them. • Pupils will work as a team to prepare an ingredients list and cost out on online shop. • Pupils will use the menu to create invitations • Through discussions, pupils will be made aware of food and hygiene procedures. • To Prepare food for cooking- measure ingredients; wash, peel and slice vegetables; prepare for oven. • To cook using a variety of methods including boiling and baking • Pupils will ask for feedback on their meal and then evaluate the cooking process and the meal – focussing on any improvements for next time. Final Piece To make a nutritious two course meal to serve to others, using locally sourced ingredients.		Previous Learning Pupils have used a range of tools and equipment to make Anderson shelters. Pupils have evaluated against their own design criteria and considered the views of others. What we will learn • Pupils will research key designers who have successfully manufactured games. • Pupils will investigate and compare designs of games already on the market, considering the types of games which would be possible for them to create. • Use research to develop a design criterion for their game, thinking carefully about their target market, and create a design for their product. • Pupils will select from and use a wider range of tools and materials to create a prototype of their game. Pupils will evaluate this against the design criteria. • Pupils will understand and use circuits in their games • To make any adjustment necessary and using the design brief, pupils will create their game. • Pupils will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	What we will learn In the school's annual Design Technology competition, pupils will be challenged to design and make a complex structure that can hold a given weight, using only the materials provided • As a class the pupils will research and evaluate different structure types that hold weight • Pupils will design a more complex structure, focusing on useful characteristics, based on a design criteria and show their design through drawings and presenting these on Flipgrid. • Pupils will choose from a range of equipment, the most appropriate tools needed to build their design • Pupils will choose materials that will meet the criteria and be the most suitable to create a study and strong structure, understanding the importance of a material's functional properties.

			Final Piece To make games that include an electrical circuit, for a games fair.	• Pupils will test their products before the competition and evaluate their design, making amendments exploring how to make it stronger and more stable. Final piece A structure that supports a given weight